



UNIVERSITI TEKNOLOGI MARA

BSS551: BUILT ENVIRONMENT ENGINEERING II

Course Name (English)	BUILT ENVIRONMENT ENGINEERING II APPROVED
Course Code	BSS551
MQF Credit	3
Course Description	The subject focused on (i) Building Environment: sound and acoustics.(ii) Building Engineering: electricity supply, telecommunication systems and intelligent building systems
Transferable Skills	Students will understand acoustics, the environmental impact of sound on the built environment, as well as building design, installation, operation, statutory requirement and legislation of electricity supply, telecommunication systems and intelligent building systems in residential and non-residential buildings
Teaching Methodologies	Lectures, Field Trip, Tutorial
CLO	CLO1 Identify the environmental influences, engineering services and building function in traditional and modern buildings CLO2 Apply techniques in the design, installation and operation of environmental engineering services in creating a comfortable living condition CLO3 Apply and analyze the relationship between engineering services and environmental science and their influences in the design and construction of buildings.
Pre-Requisite Courses	No course recommendations
Topics	
1. Sound 1.1) Sound, nature of sound, sound levels, hearing nature, sound attenuation, sound insulation and absorption	
2. Noise 2.1) Noise control, environmental impact and noise pollution, scope of control, conservation and preservation, vibration in high rise building and statutory requirements.	
3. Acoustic 3.1) Room acoustics, reverberation time, sound absorption and reflection, statutory requirements and legislation	
4. Electricity system 4.1) Electricity supply, generation and distribution, installation and application, circuit design and layout, testing and commissioning, safety procedure and protection, statutory requirements and legislation	
5. Telecommunication 5.1) Telecommunication systems, function, design and components, installation and fittings, telephone, Private Automatic Branch Exchange (PABX), intercom, internet and audio-visual facilities, statutory requirements and legislation	
6. Intelligent Building System 6.1) Definition, function, design considerations, integration, management and maintenance	

Assessment Breakdown	%
Continuous Assessment	30.00%
Final Assessment	70.00%

Details of Continuous Assessment	Assessment Type	Assessment Description	% of Total Mark	CLO
	Assignment	weekly tutorial assignments-group & individual	20%	CLO1 , CLO2 , CLO3
	Test	n/a	10%	CLO1 , CLO2 , CLO3

Reading List	Recommended Text	<ul style="list-style-type: none"> • Smith, BJ Peters RJ & Owen S 1996, <i>Acoustics and Noise Control</i>, Longman London • Mc Mullan, R, . 2002, <i>Environmental Science in Building</i>, 5th Ed., Mac Millan London • Chadderton D.V Building Services Engineerings 2000, <i>Chadderton D.V, 2000, Building Services Engineerings, 3rd Edition, E & FN Spon, London., 3rd Ed., E & FN Spon London</i>
	Reference Book Resources	<ul style="list-style-type: none"> • Green, R 1997, <i>Building Services, Technology & Design</i>, Longman & CIOB London • Burberry, P 2000, <i>Burberry, P, 2000, Environment & Services, 8th Edition, Longman, London., 8th Ed., Longman London</i> • Hall, F 1998, <i>Building Services & Equipment</i>, Longman London
Article/Paper List	This Course does not have any article/paper resources	
Other References	This Course does not have any other resources	